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TECH NEWS



VOL. XXVI

WORCESTER, MASS., APRIL 27, 1935

NO. 22

TECH OPENS DOORS TO PUBLIC TODAY

JUNIOR PROM TO FEATURE PAUL TREMAINE AND HIS ORCHESTRA

Bancroft Hotel to Be Scene of Annual Affair

"HOTTENTOT" PERFORMANCES AND HOUSE PARTIES TO COMPLETE GALA WEEKEND

On Friday evening, May 3, 1935, the much anticipated and talked about Junior Prom will be held in the ballroom of the Bancroft hotel from ten p.m. to three a.m. It is expected that a large portion of the student body will be present and that all who attend this gala event will have a very enjoyable evening.

The music this year will be furnished by Paul Tremaine's highly praised orchestra, which was secured for this event after considerable dickering and effort. This orchestra was at one time one of the best in the country and now, although by no means the best, it is regaining its popularity by leaps and bounds. The Prom Committee should be praised for their efforts in securing this excellent orchestra.

The ballroom will be very attractively decorated with appropriate and pleasing colors which will harmonize with the season and the event. The decorating is under the supervision of the Prom committee and it is certain that they will do an excellent job in order to please those who attend the Prom.

Before vacation there was a rumor circulating around the campus that there would be no favors. That rumor was false; there will be plenty of favors, and no one who attends will fail to receive one of these favors.

Although the cost per couple for the Prom has been set at five dollars, there should be no cause for complaints, for if one looked at the charges for similar events at other colleges, he would find these charges in most cases considerably higher than ours. In some cases too, the orchestra engaged has no known popularity and adequate arrangements for the event have very often been sadly lacking. Here, this is surely not the case.

Chief among the patrons and patronesses at the Prom will be President and Mrs. Ralph Earle. They are always glad to attend such a function and they are always willing to do all they can to help. Those who attend should make it a point to do all they can to insure a pleasant evening for President and Mrs. Earle.

It is now up to the student body to support the Prom, to make it a financial success, and to insure a pleasant evening for those who attend.

The evening of the Prom will be marked by numerous house parties among the fraternities, in fact every fraternity on the hill will hold a banquet or party. The guests of the house parties will be able to enjoy the In-

(Continued on Page 2, Col. 3)

NOTICE

All 75 cent tickets for the Hottentot have been disposed of.

PREXY GIVES EASTER MONDAY CHAPEL TALK

Emphasizes Character Building By Studying the Careers of Successful Men

This is Easter Monday. Yesterday all the churches were crowded with worshippers; in these days, when religion is altogether too much set to one side for other far less helpful things, this is encouraging for the future welfare of the world.

For us today, when we gather here after the short interlude in our studies for the intensive work of the last quarter of the year, the Epistle for the day contains something we might well think about and act upon its lesson. We can read it right of course but our real job is to follow it.

Acts X, 34. "Of a truth I perceive that God is no respecter of persons; but in every nation he that feareth him; and worketh righteousness, is accepted with him."



PRESIDENT EARLE

The direct counsel to all of us to win out in the race of life because of ourselves alone is there. We all, I think, realize that we have learnt from childhood that no one respects a person *per se*, each one has to demonstrate his own worth. As a youngster we go to school only to be made to feel how little we count by the older students, and later entering college the freshmen are treated with great contempt by upper classmen. Those two lessons as to how little we amount to, even though a brilliant scholar or an athlete, start in us a realization that the world of business of trade, and of our lives is no respecter of persons, each individual must work out his own career and unless he works properly he cannot succeed.

As I look upon the careers of men I know it is easy to see that "God is no respecter of persons."

Here at college we have our daily tasks to do, and in their doing our char-

CALENDAR

SAT., APRIL 27—

2:00 P. M.—9:00 P. M.—At Home Day.

2:30 P. M.—Baseball, Tech vs. New Hampshire, away.

3:00 P. M.—Tennis Match, Tech vs. M. I. T.

6:30 P. M.—At Home Day Banquet S. R. Hall.

MON., APRIL 29—

9:50 A. M.—Chapel Service, Prof. L. L. Atwood.

5:00 P. M.—Intramural Baseball, T. U. O. vs. L. X. A.

7:30 P. M.—Masque, S. R. Hall.

TUES., APRIL 30—

5:00 P. M.—Intramural Baseball, S. A. E. vs. Friars.

8:00 P. M.—Worcester Chem. Club, Dr. Butler.

WED., MAY 1—

4:30 P. M.—Intramural Baseball, A. T. O. vs. P. G. D.

5:30 P. M.—Intramural Baseball, T. U. O. vs. T. X.

7:30 P. M.—Masque, S. R. Hall.

THURS., MAY 2—

5:00 P. M.—Intramural Baseball, L. X. A. vs. P. S. K.

10:00 P. M.—3:00 A. M.—Junior Prom, Hotel Bancroft.

FRI., MAY 3—

5:00 P. M.—Intramural Baseball, S. A. E. vs. A. T. O.

10:00 P. M.—3:00 A. M.—Junior Prom, Hotel Bancroft.

SAT., MAY 4—

10:00 A. M.—Interscholastic Track Meet Trials.

2:30 P. M.—Interscholastic Track Meet Finals.

2:30 P. M.—Track Meet, Tech vs. Rhode Island State.

8:15 P. M.—Masque, Tuckerman Hall.

SOPH HOP AT COUNTRY CLUB

Music To Be Furnished By Web Maxson

On Friday, May 24th, the Sophomores will hold their Soph Hop, the annual Sophomore class dance, at the Worcester Country Club, owing to the kindness of several members of the Worcester Country Club and the ambition of the members of the Decoration Committee. Having it at the Worcester Country Club is a new idea and a step in the right direction. Usually the Soph Hop has been held at the Dormitory, but have been little more than the weekly Dorm dances. However, the innovation this year will remedy that. The music is to be furnished by Web Maxson of Springfield. Maxson has an excellent band. The price of the tickets to the Hop is near two dollars, and the Sophomores expect a goodly number to be present. Tickets will be for sale next week.

acter is made, for in classroom we have to stand on our own feet. If we do not prepare for the day our teachers cannot make us to do well; no, that is not possible. Still, as our associates will in actual life, they do their utmost to

(Continued on Page 2, Col. 1)

SEVEN MAJOR DEPARTMENTS TO DISCLOSE WORK AND RESULTS

Spectacular and Unusual Experiments to Explain Rather Than Conceal Mysteries of Science

FULLER LECTURE TALK BY PROF. MAGOUN OF MIT

Tau Beta Pi Pledges Four Men Labor Leader and Students Assist in Problem

The Fuller lecture on April 9 opened with a few selections from the band. After singing "America," the meeting was turned over to Tau Beta Pi. This honor society pledged four men from the Junior class, namely: John R. Brand, Donald L. Edmunds, Harold F. Hendrickson, and Carl Swenson. The leader of the assembly, Dana Woodward, turned the meeting over to Pres. Earle, who told the gathering that the human element was to be discussed today, and by a man who knew problems connected with human life. This man

(Continued on Page 4, Col. 1)

SONG CONTEST CLOSES SOON

Contestants Asked To Hand in Entries This Week

Not many songs have been entered in the contest for a new Tech song, so it is at this time that the Tech News Staff advises all contestants to get their songs in, as the contest closes soon. There is a very good chance to win some extra money so get busy. The last day for the submission of selections in the contest will be Saturday. Particulars of the competition are as follows:

1. There will be awards of \$50.00 in prizes; a first prize of \$25.00, a second prize of \$15.00 and a third prize of \$10.00.
2. Songs may be submitted by any person connected with the Institute.
3. One person may write both words and music, or two or more persons may collaborate.
4. Contestants are not restricted as to type of song required. Your song may be a new Alma Mater, a new marching or fight or victory song for sports events, rallies, etc., or it may be a song with one or more verses with chorus based upon Tech History, (to name only three types we think of at the moment).
5. When handing in your contribution, do not sign it with your true name. Use a pseudonym.
6. Songs to be judged in the contest should be handed to a member of the Tech News Staff or placed in Mr. Fitzgerald's mail box.

PREXY EXTENDS WELCOME TO FRIENDS, VISITORS AND PROSPECTIVE STUDENTS

Worcester Polytechnic Institute extends a cordial welcome to its friends on Saturday, the twenty-seventh of April. The staff and students of the Institute join with me in hearty greetings, and the hope that you will find on Boynton Hill so much of interest that you will feel more than repaid for your visit.

All hands are anxious to make you have a profitable as well as a pleasant visit, and we trust that you will not hesitate to ask about the Institute, its life, and its work.

The various exhibitions set up have been prepared by students and by the staff, out of hours, in the effort to be of service to the community, and to young men who are interested in learning what an engineering education means.

RALPH EARLE,
President.

The zero hour which will mark the liberation of so many forces from their arrested state is fast approaching. It will be a spectacular performance when all these marshalled forces having within them so much power and yet so apparently submissive are set free. Everywhere there are unmistakable signs of much energy held in abeyance waiting only for the magic touch of the skilled scientist to set it going. For him it is a world of pawns or mechanical gadgets to be directed to useful or destructive activity. With the aid of marvelous scientific equipment and apparatus, he will direct the wonderful interrelation and interplay of delicate operations whose success depends upon absolute precision of timing, measurement and manipulation. In his hands all seems so natural and easy, incapable of error, yet how slight a variation in any of his calculations or manipulations would render disastrous or ineffective the very operations he is performing. To make the inanimate vital, to endow the inactive with directed and controlled activity such will be his role but the beholder will be filled with a sense of wonder and admiration.

To try to give special comment to each of the exhibits would be a futile task for they themselves are convincing evidence of their claim to superiority and ingenuity. They stand as vivid testimony to man's creative genius and inventive spirit. However, we would like to presume to mention some of the displays that seemed to recommend themselves to us for special recognition either because of their unusualness or because of their immediate applicability to or connection with everyday life.

One that is noteworthy because so unusual, is "stubborn Stella." This is a synthetic burro whose inwards are composed of all sorts of electric arrangement.

(Continued on Page 7, Col. 1)

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AN EXPLANATION

On this annual occasion, we of the NEWS Staff join with the faculty and student body in welcoming all friends and visitors to our school. We are doing our best to show what is going on without making it too spectacular. If we wished, we could put on a show that would rival the best three ring circus, but that wouldn't be fair. What we are doing today is to concentrate the scholastic activities of the entire four years course at the Institute into one afternoon and evening. Practically every demonstration on the Hill is made by the students, and is merely a repetition of what they have been doing during the past few months. In this way we are giving you people outside our little sphere a fair and square notion of the laboratory work that Tech students are engaged in.

Until last year the entire plans for At Home Day were handled by the students, but then the faculty tried a hand at the arrangement of plans with such outstanding success that they are in charge this year also. This does not mean, however, that the instructors are doing the actual performances; they are merely handling the publicity and the plans for what work will be done by the students. They have continually stressed the fact that this is the students' At Home Day, not a show by the faculty.

You will notice by the articles in our paper that we are doing other things besides what you see here today—Junior Prom and house parties, baseball, tennis, track, dramatics, clubs—in fact we are trying to forget formulas and figures once in awhile to engage in practically everything that a liberal arts student does. We cannot afford nearly as much time for them but we are getting a start so that we can become more well-rounded after graduation. That is one of the biggest advantages of a small college, in that we are given a chance to meet people and use our own initiative. At Tech we are learning to be men, not just engineers.

CHAPEL TALK

(Continued from Page 1, Col. 3)

make us he men. When we don't do our part we are forgetting the lesson of Easter.

What we want generally seems long in coming and whether it comes to us or not depends largely upon our own efforts. We need to take every chance for encouragement and for cheer that is afforded in our work. Those of us who have a low mark to pull up in the coming month and a half can do it if we only do our best and not expect some one else to do it for us. We are with you all who are on the danger line or worse and are urging you in our hearts to keep your effort upon obtaining the objective you must have: a degree with honors.

On this date eighty-one years ago, the Mississippi, the flagship of Commodore Matthew C. Perry, returned to New York, he with the treaty opening Japan to the brotherhood of nations which he had been dispatched to secure some two years before. His brother had won sufficient fame for one family through his victory at Lake Erie. But Matthew, simply because of that, would never have won fame, and so he found as he expected that the reputation of

his family did not count with the Japanese. If he was to win anything he must do it himself. His mission was known to the world and the press doubted whether the Emperor of Japan would receive Commodore Perry with "most indignation or most contempt." Pretty well ridiculed was the expedition, but Perry prepared himself for the job in the most meticulously and thorough manner, learning of the Japanese and their history and their probable state of mind through hard research. Difficulties of all kinds were put in his way, officers inferior in rank to him were sent but he refused to see any but ones of equal or higher rank. When told he was too close to Yokohama and asked to move he simply moved in closer, and he acted throughout with such firmness, sagacity, tact, dignity, patience and determination that he won the day, completed his job and won a place in history the equal of any statesman, or of his brother, the victor of Lake Erie. That he had used in his negotiations things then unknown to Japan such as agricultural implements, clocks, telegraph instruments, lifeboats, a small railway, and so on, is all to his credit.

Perry's characteristics as just listed are what students graduating need to

bear in mind these days when seeking a job. That getting a job is a job, one that requires all of us to stand on our own, not relying on letters but following up in person. It is easy to deny a request by letter or one made for some one by some one else. Many fine suggestions along these lines are now available.

This month recalls also to us the work of a quiet unassuming man who was immortalized in that booklet, "The Message to Garcia," of which more copies have been made than of any other book except the Bible. That fact should be enough to cause us all to follow his example and do our job without asking exact details but just going ahead. That story appeared in yesterday's papers for at least the 100th million time, and I repeat again that I believe if we could act as Colonel Andrew S. Rowan, in April, 1898, did, we would secure and keep the job we need.

To make ourselves respected is no easy job, but yet it's not an impossible one provided we utilize our teachings here. In doing this if we study intelligently the careers of others we can probably give ourselves a character that we have not possessed.

God is no respecter of persons, and neither is your fellow man unless you deserve respect because you "worketh righteousness."

DR. MASIUS GIVES FORMAL TALK ON MICRO-ATOMS

Talking Picture On Molecular Structure Shown At Colloquium

At the Physics Colloquium held Tuesday afternoon, April 9, in the Physics lecture room of the Salisbury Laboratories, Dr. Morton Masius delivered an interesting and instructive lecture on the history and development of methods of calculating entropy and probability with respect to micro-atoms. After the formal lecture, Dr. Masius discussed briefly the possibility of these theories being adapted to the present scientific theory of human life. There a talking film on molecular structure and activity was shown, which cleared up many points of Dr. Masius' lecture. An audience of about ninety attended.

At the close of the meeting, Dr. A. Wilmer Duff announced that the speaker at the next Colloquium will be Assistant Professor Richard A. Beth of the Physics department of W. P. Professor Beth has been away from the Institute for a year on a leave of absence, during which time he has been working at Princeton with Dr. Albert Einstein. The subject of his talk will be his work with Dr. Einstein, and at the end of his lecture he will give a short personal account of the eminent scientist as he knows him.

JUNIOR WEEKEND

(Continued from Page 1, Col. 1)

terscholastic Track meet to be held in the morning and afternoon the day after the Prom. There will also be a Varsity track meet between Rhode Island State and Tech on the same day.

The Masque performance to be held on May 4, at 8:00 p.m. in Tuckerman Hall, will present the only dramatic performance of the Masque Association this year.

The play this year is "The Hottentot," a fast moving comedy in 3 acts by Victor Mapes. The cast, consisting of eight Tech students and three girls from this vicinity, has some very good talent in it.

The play is being coached by Mr. Albert Smith, who is now a teacher at South High School.

Saturday evening the fraternities will run a Round Robin dance. Every House will have a dance and fraternity men and their guests will be welcome at all Houses.

MOVIES SHOWN AT THIRD MEETING OF SKEP CREWS

Three Speakers Featured

On Tuesday evening, April 9, the Sceptical Chymists held their third meeting of the present term. The meeting featured three good speakers and a two-reel movie.

Mr. Feldman opened the meeting by discussing At Home Day with those members who were to have exhibits or who were to serve as guides. The three talks were then presented and the movies were shown afterwards.

The first speaker, Mr. Nordstrom, spoke on "The Mechanism of Rubber and Its Elasticity." His talk dealt chiefly with the rubber molecule, pointing out its characteristics and manner of stretching. This talk was very well presented and was extremely interesting.

Mr. Dahlstrom then spoke on "Corrosion Problems," in which he explained why corrosion took place and how it could be checked. He enumerated some experiments to prove his statements.

Mr. McInnis, the last speaker, talked about Linoleum. He discussed the advances which have been made in the production of this well known product

DOCTOR JENNINGS HOST TO COSMOPOLITAN CLUB

Rev. Macy is Guest Speaker

The Cosmopolitan Club met Tuesday evening, April 9, at the home of Dr. Jennings at 18 Boynton St. Rev. Paul Macy, pastor of the Plymouth-Piedmont Church spoke on the subject of "Non-Violence." A general discussion followed Dr. Macy's talk.

Eleven members were present, and in the absence of President Ernst Krippendorf, John Sutcliffe, vice president, took charge of the meeting.

Other members of the faculty present besides Dr. and Mrs. Jennings were Dr. Atwood and Mr. Siegfried. Refreshments were served, Mrs. Gay and Mrs. Swan assisting.

and he gave a clear description as to how the numerous types of this product were made. This talk was presented exceedingly well.

Through the efforts of Dr. Butler, two short reels showing the production, characteristics, and uses of Monel metal were secured and shown. These movies were very enlightening and left no doubt as to the superiority of Monel metal over other products of similar character.

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...says Tokyo

Translating the symbols, the Tokyo telephone operator says, "The connection is made—go ahead, please." Meaning that now you can talk to Japan from any telephone in the Bell System.

Interestingly, Japanese was the first foreign language ever transmitted by telephone—when in the winter of 1876-77 three Japanese students at Harvard visited Alexander Graham Bell in Boston. These men have lived to see the day when they can talk with Boston from their homeland!

Seeking to put the whole world on such easy speaking terms, Bell System service now enables you to reach more than 93% of the world's 33,000,000 telephones.

Why not drop in at home tonight — by telephone? For a lot of pleasure at bargain rates, call by number after 8:30 P. M.

BELL TELEPHONE SYSTEM



INITIAL BASEBALL GAME AGAINST NEW HAMPSHIRE AT DURHAM, N. H.

Veteran Red and Gray Team To Be Pitted Against the Wildcats Sandquist and Starrett Will Be the Probable Battery

DECIDED STRENGTH IN BATTING EVIDENCED IN EARLY SEASON PRACTICE

The opening game of the Tech baseball season will take place at Durham, New Hampshire, Saturday afternoon, with the New Hampshire State team as the first opponent. As yet the Worcester team is untried as to stiff competition although scrimmages have been played with Commerce High. In these practice sessions, however, a strong batting attack was noticed, which is a considerable improvement over last year's playing.

Tech will enter the game with a team composed mainly of veterans. Jackie Germaine and possibly John Despotopulus will be the only starting players who have not had previous experience under "Pete" Bigler. Germaine is a Freshman and promises to sufficiently fill the hole left by "Spitz" Bottcher at shortstop. Despotopulus is a second year man and has been fighting nip and tuck with Jack Casey, another Sophomore, for the third base assignment left vacant by the transfer of "Ace" Howes to the role of a pitcher. Casey, however, played brilliantly against Commerce in centerfield and will probably get the call over "Al" Cantor.

First base will again be capably filled by Floyd Hibbard, a veteran of the past three seasons. As running mate, he will again be assisted by "Art" Moosa at second.

Left field will be filled by John Nor-

eika, a veteran of two seasons back, who was ineligible last season. John's consistent hitting during the practice sessions has earned him the position of clean-up man in the batting order.

Ray Des Rochers, a Senior, whose hitting last year was one of the main features in the Tech attack, will hold down the right field position.

During the Easter vacation, "Sandy" Sandquist and "Jack" Bronk joined the ranks of "straight" men after residing in the ranks of the Sigma Betes since February. Sandquist's eligibility will bolster the weakness which is evident in the pitching department. Last year Sandy produced the only win of the season, that against Clark, and at the same time contributed to the local cause by pounding out a double and a home run. Capt. Ray Starrett will again be on the receiving end.

During the practice game with Commerce on Tuesday, Tech pounded the high school hurlers freely, scoring a dozen runs and holding the schoolboys scoreless. For the first time in many seasons, every man connected for at least one hit. The dimming light however was in the rugged base running and loose fielding which the Tech team exhibited.

The strength of the New Hampshire team is unknown, the wildcat team not having played yet, but if our memory serves us right, a close game is in order. Those who witnessed last year's encounter will remember the fine game, marred only by Tech's miscues, which the Durham team won by a 3-2 score after a pitcher's battle.

TENNIS SEASON STARTS TODAY

Tech To Play First Match At Cambridge With M.I.T.

This year's tennis team looks forward to a hard and, we hope, successful season. Ex-Captain Russ Corsini is the coach and Richard P. Merriam was elected captain by the lettermen present. The team with Joseph Flanagan, Carly W. Borden, the other two positions are being played out between Charlie Michel, a sophomore and "General" Grant, last year's captain of the Hebron Academy Tennis team and Robert Mimmo the latter two are freshmen. Captain Merriam will be unable to play for a while due to a sprained ankle.

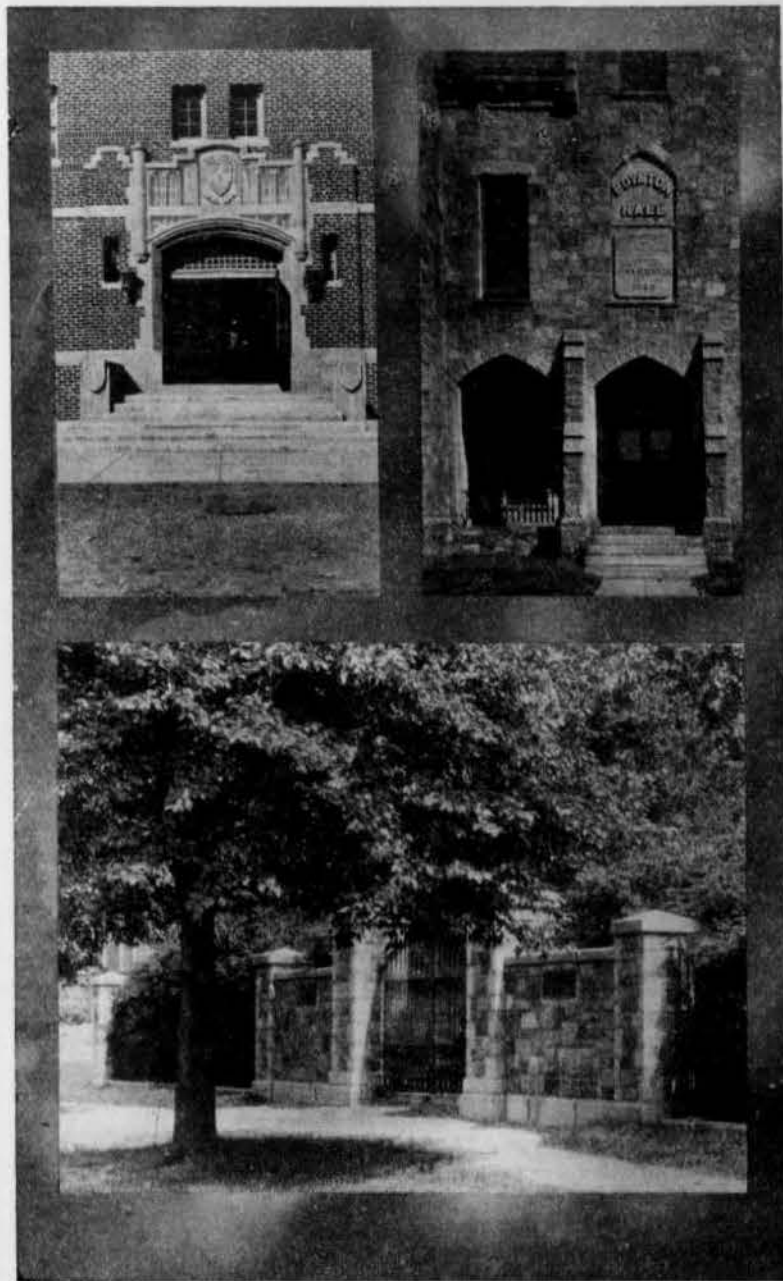
Their first match will be against M. I. T. today in Cambridge. M. I. T. has the 18th National ranking player in J. Gilbert Hunt, which is quite a disadvantage for the Tech team to start with. The rest of the schedule follows: May 4, Providence College at Tech; May 8, Fitchburg State Teachers at Tech; May 11, Trinity College at Hartford; May 15, Tufts at Tech; May 18, Clark at Clark; May 25, Springfield College at Springfield.

RIFLE TEAM LOSES CLOSE MATCH TO WESTBORO

Engineers Lose By 3 Points

On March 29 the Tech Rifle team traveled to Westboro for their last match of the season. The Westboro team won the match with but three points to spare. Westboro 835, Tech 832.

| TECH | WESTBORO |
|------------|--------------|
| Harvey 181 | Simmons 171 |
| Allen 180 | Hunter 158 |
| Lee 174 | Kalenian 176 |
| Cole 154 | Spinney 167 |
| Mallis 143 | Benton 156 |
| Total 832 | Total 835 |



Upper Left—Steps of Gym.
Upper Right—Boynton Hall Steps.
Lower—Gates to Alumni Field on Park Avenue.

G-E Campus News



MAKING FLAWS SQUAWK

A VALVE used in a General Electric refrigerator unit requires a small steel spring, which, during the time that a refrigerator is in operation, is used several hundred times per minute. A small defect, even a microscopic scratch, would be sufficient to cause the spring to fail after a relatively small number of operations. Consequently a fast, certain means of inspection for the steel ribbon of which the springs are made was necessary.

It is generally known that, if a secondary coil is placed around a core of iron and the iron is placed in a magnetic field, there is a definite relation between the chemical and physical properties of the iron and the resultant electrical wave induced in the secondary coil. Using this knowledge as a base, a General Electric laboratory built an inspection device. The spring material is run through a magnetic field, and the induced current is fed through an amplifier to a loudspeaker. A hum peculiar to the magnetic properties of the material sounds in the loudspeaker as long as the quality of the material is uniform. Any flaw, however, changes the magnetic properties, the magnetic field then becomes unbalanced, and the loudspeaker emits a shrill squawk.

STREAMLINE COMMUTING

PORTLAND-BOSTON commuters will shortly receive a taste of real speed. Fairly before they have a chance to swallow their breakfasts, they will be whisked into North Station by the "Flying Yankee." In the morning, the train will streak the 115 miles from Portland, Maine, to Boston in 110 minutes. Then, during the day, it will make a round trip to Bangor, Maine, making the 250-mile

trip each way in 265 minutes. When the business day closes, it will streak back up Portland way with the commuters it brought down in the morning.

The "Flying Yankee" is a 200-foot articulated train, of lightweight, stainless-steel construction. Its three sections are carried on four trucks. Power originates in a 600-horsepower Diesel engine, directly connected with a General Electric generator. Two General Electric traction motors are mounted in the first truck. An auxiliary generator and the control equipment are also built by General Electric.



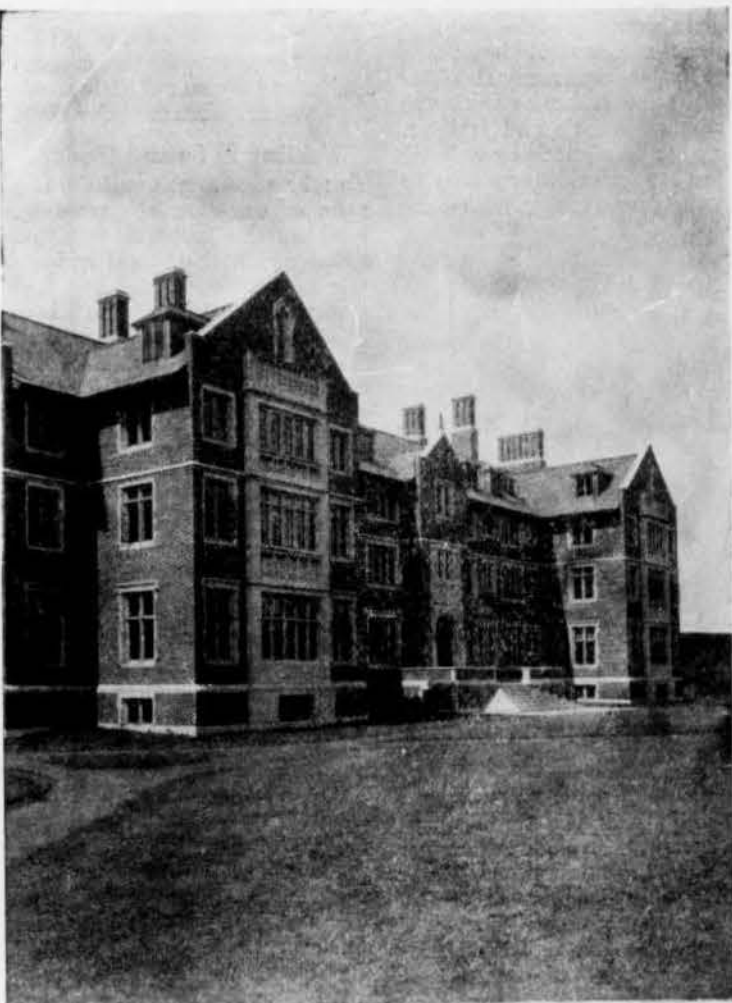
HOT DOG

PEG is an elderly English setter, who can trace her family back to some of the very best nobility in her breed. When she was younger, she enjoyed nothing more than romping about in the snow. But in the last few years, American winters, with all their sub-zero weather, have not agreed with her too well.

So last year, her owner, H. C. Ward, U. of Wisconsin, '95, of the General Electric office in Rochester, N. Y., decided to heat her kennel. Quite appropriately, he decided to do the job electrically. He installed a length of G-E soil-heating cable, plugged it into an outlet, and turned on the juice.

He did not stop there, however. Such a fine old dog deserved a polished job. He also installed a G-E thermostat in Peg's quarters to keep the temperature constant through all kinds of weather. Now while other dogs cower in frosty kennels, she disposes herself in luxury. She wags her thanks to General Electric.

96 138FBI



Sanford Riley Hall

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New Models

We Know You Will Like Them

Kenney-Kennedys



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Mass.

GENERAL ELECTRIC

FULLER ASSEMBLY

(Continued from Page 1, Col. 4)

was Prof. F. Alexander Magoun, Professor of Humanics at M. I. T.

Prof. Magoun opened his lecture by stating that there are only good and bad crews and captains, that mistakes come about not by not knowing the problem in hand, but by the misunderstanding of people. He pointed out for example the story of a young college graduate who knew his theories but at best did not understand people. The story goes that this graduate obtained a position with the Bell Telephone Co. At one of the meetings, where an older employee was talking to a gathering, the young man disagreed with what his superior had to say. He immediately got up and told the older that he, the older, was full of seven different kinds of canal water.

Prof. Magoun went on to say that we learn best not by preaching but by experience. This method of learning by experience is used, in coordination with theory, by Prof. Magoun in his class in humanics. Prof. Elliot Donlap Smith of Sabrook College, Yale, was the first to use this method of teaching. This method consists of three parts, the fundamentals are worked out in class, a demonstration is given and finally a post-mortem is held.

Problems dealing with life, Prof. Magoun pointed out, are not like math problems which can be solved by formulae. Life has no formulae. In problems of life the past and the future must be concentrated into the present. These class demonstrations were as near as possible made to resemble the actual case. Prof. Magoun told the audience to keep these things in mind as the case demonstration was presented: simplify the case by pinning it down to fundamentals, think of these cases as real, not as plays, at all times to avoid unnecessary arguments, to listen attentively to the arguments of the other side, and last but not least to use sound judgment, not emotions, in dealing with these problems.

In these demonstrations those taking part in them knew the theory but they needed experience. Prof. Magoun exemplified the necessity of experience with the following story.

"There are only three things one must know about milking a cow: first, milk the cow from the right hand side; second, milk opposite teats only; third, close your hand from the index finger down. That is the theory. Try it."

Prof. Magoun introduced Claxton Munro, Jr., and Howard R. Garner as hypothetical employers, and Raymond Nerie weaver and union leader.

As the three came in, Mr. Garner opened the discussion by asking Mr. Nerie what the chief objections of the workers were. Mr. Nerie replied by saying that the workers could not operate two looms at the same time. When asked why not, he replied that the breaking thread required the individual attention of a worker. Mr. Garner then promised that certain changes would be made in the looms and then asked if the workers would try a few looms as an experiment. The question as to the working of two looms by one man, Mr. Nerie said, was against the NRA. Mr. Garner then cleared this question to the satisfaction of Mr. Nerie. Mr. Nerie tried another form of attack, bringing up the human angle. His point of view was that if each man ran one loom more men would find work. This was ruled out as impossible by Mr. Garner on the basis of financial difficulties. The discussion closed due to lack of time.

Prof. Magoun then took charge and explained to the audience certain phases of the discussion. He told the gathering that what had actually happened was that an agreement between the strikers and the mill owners had not been reached, thus bringing about the closing of the mill. As in the case of all unsettled disputes between owner and worker, both lost money.

The assembly closed with the singing of the Alma Mater and the band playing the Star Spangled Banner.



The Skull Tomb at the South-East Entrance of the Campus.

Invisible Joints—Strong, Trim, Simple

Oxy-acetylene Welding contributes these important advantages to the design and manufacture of metal products.

By W. B. MILLER*

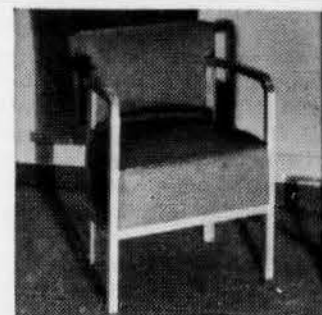
IN THE fabrication of metals it is not necessary to sacrifice appearance and simplicity for strength. Modern methods have changed that. Through the use of welding, it is now possible, with a minimum investment in equipment, to fabricate products with strength where it is wanted. Extra bulk throughout for reinforcing the weakest spot is not necessary.

Welded for Strength

The welded joint is as strong as or even stronger than the metal it joins. It is leak-proof and thus

For Rigorous Use

For years, field hoes were manufactured by a forging and rolling process involving a considerable investment in machinery. An enterprising hoe manufacturer found that he could eliminate inherent weaknesses by welding. He designed a bimetal job: the hoe blade of a steel made to hold its cutting edge longer, the sturdy shank of a steel selected for its ability to withstand shock and fatigue. These are then joined by welding with a bronze welding rod. In this way there is no compromise—ma-



TRIM JOINTS—for metal furniture are made by welding. Chairs of welded metal easily support as many heavyweights as can hang on.

support the weight of several stout men without any sign of giving way. The welded joints are rounded and curved so that but little grinding is necessary for a smooth surface.

Welding Is Sound Design

To take advantage of all the features of oxy-acetylene welding, products should be designed or redesigned with the aid and advice of competent welding specialists. Engineers of The Linde Air Products Company are constantly perfecting details of oxy-welded design which are of interest and assistance to manufacturers. Consultation on welded design can be had without charge from any Linde Sales Office. They are located in leading cities of the country: Atlanta, Baltimore, Birmingham, Boston, Buffalo, Butte, Chicago, Cleveland, Dallas, Denver, Detroit, El Paso, Houston, Indianapolis, Kansas City, Los Angeles, Memphis, Milwaukee, Minneapolis, New Orleans, New York, Philadelphia, Phoenix, Pittsburgh, Portland, Ore., St. Louis, Salt Lake City, San Francisco, Seattle, Spokane and Tulsa. Everything for oxy-acetylene welding and cutting—including Linde Oxygen, Prest-O-Lite Acetylene, Union Carbide and Oxweld Apparatus and Supplies—is available from Linde through producing plants and warehouse stocks in all industrial centers.

With Engineering Cooperation

Users of oxy-acetylene welding and cutting, and other products and processes developed by Units of Union Carbide and Carbon Corporation benefit from a most unique coordination of scientific research with manufacturing, sales and service facilities. These combined resources of a vast organization assure a full measure of satisfactory performance.

Engineer, Union Carbide and Carbon Research Laboratories, Inc. Unit of Union Carbide and Carbon Corporation.



STRONG JOINTS—95 per cent of all aircraft have oxy-acetylene welded fuselages, wings and other members.

admirably suited for piping or containers of any sort, to resist pressure, temperature, or shock. Another way of making the product stronger is to weld it from one of the new alloy steels or strong non-ferrous alloys. In this way another desirable property is usually obtained—lighter weight. Welding can be used to make joints in any of the commercial metals.

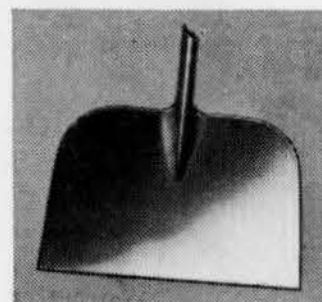
In Aircraft Construction

Outstanding as an example of the use of welded joints for their strength is in aircraft manufacture. In an airplane fuselage, every joint must be strong enough to withstand heavy stresses from all sides in flying. The joints must be tough also, for the shocks they undergo are sudden as well as powerful. They are made in a strong alloy—chrome-molybdenum steel. Welded joints are the standard of the aircraft industry because they fulfill faithfully these essential requirements on which so many human lives depend.

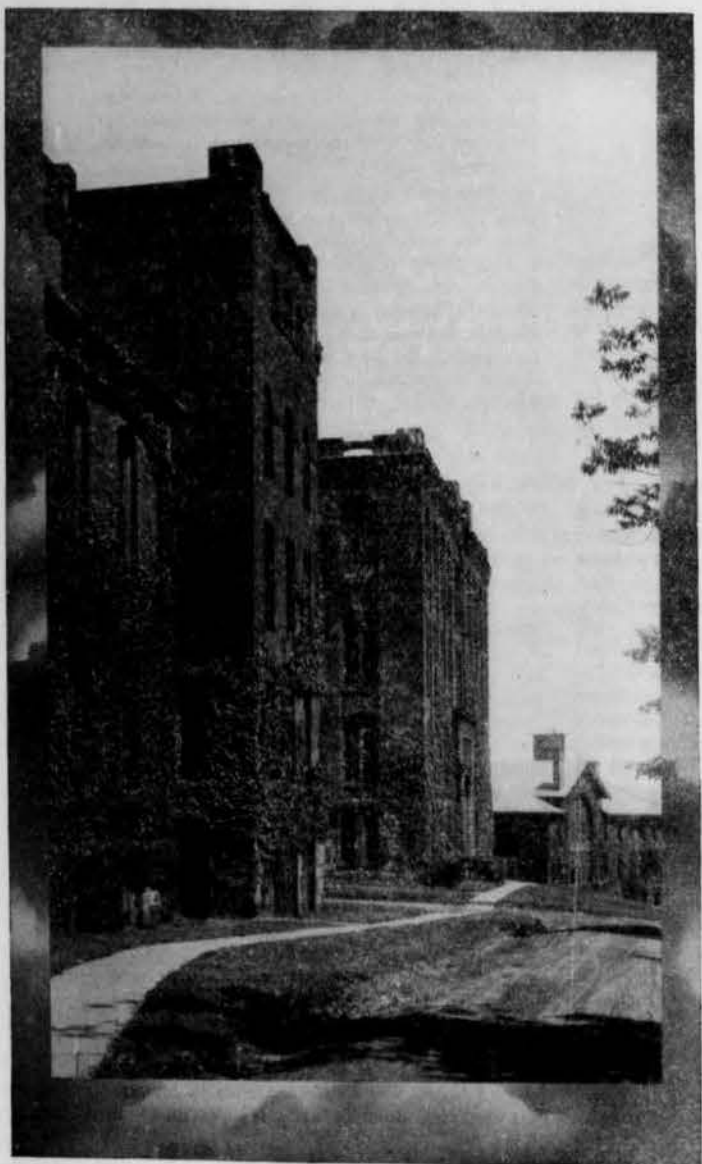
materials are chosen for the job they are to do—and the manufacturer makes a better hoe at lower cost.

In Modern Furniture

In making metal chairs it is necessary to get a strong ductile joint and one smooth in contour to take the various special finishes which are applied to simulate wood. The strength of joints made with special high strength welding rod can



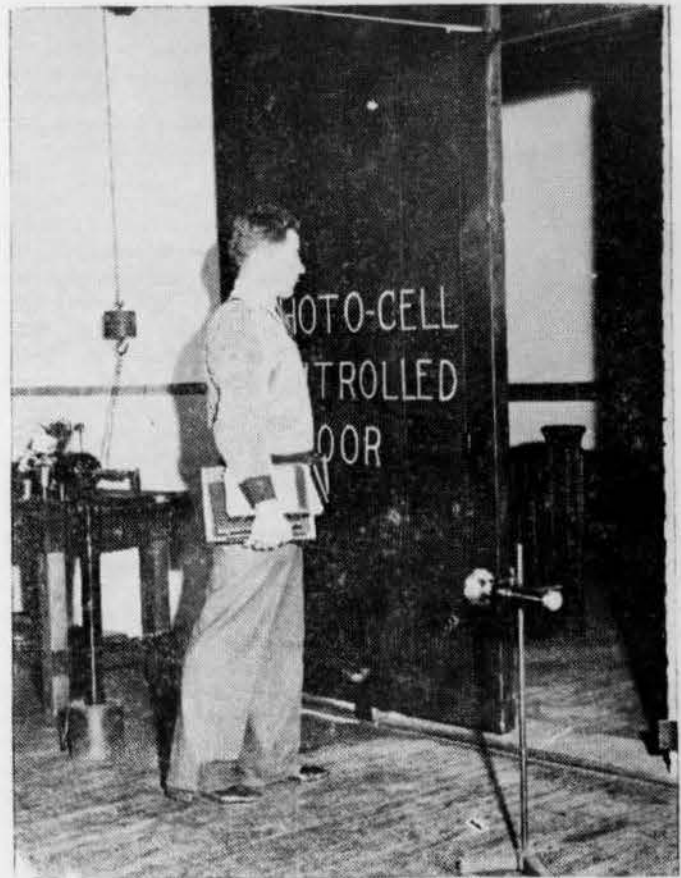
SIMPLE—by adopting welding for these field hoes, the manufacturer produces a product with none of the disadvantages of older designs.



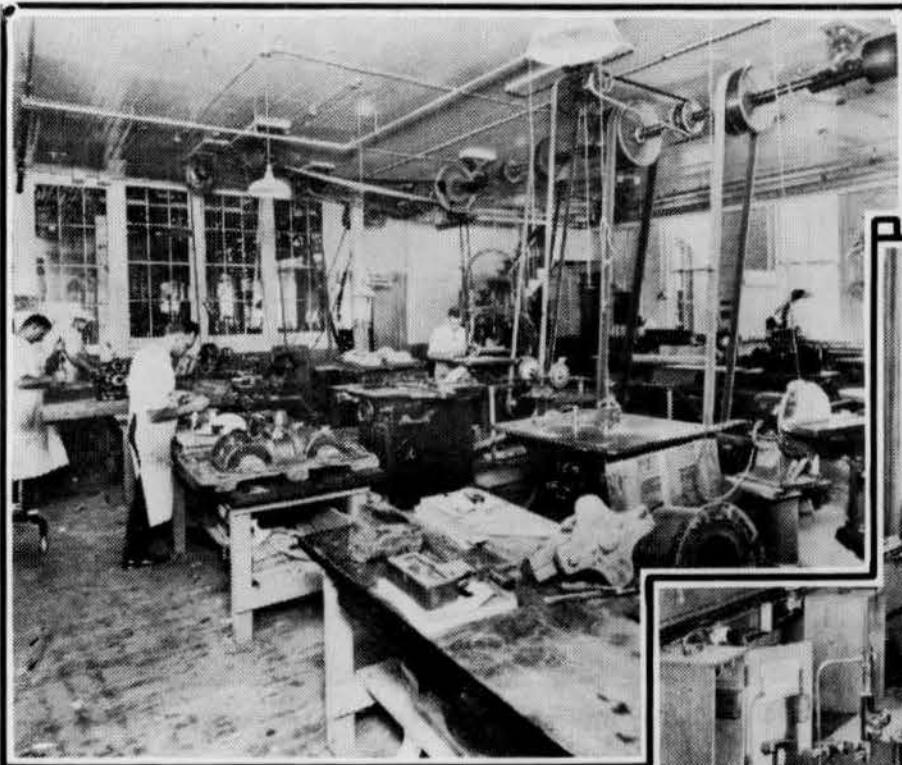
Looking past Salisbury toward Electrical Engineering Building with the Washburn Shops in the foreground.



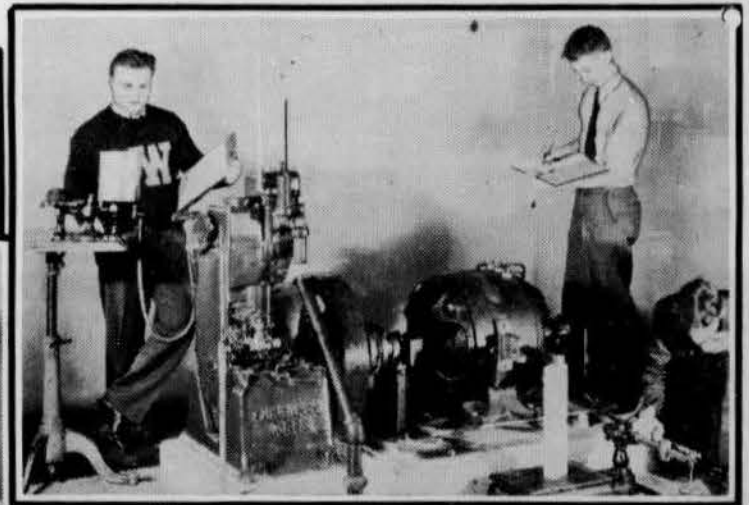
Stubborn Stella



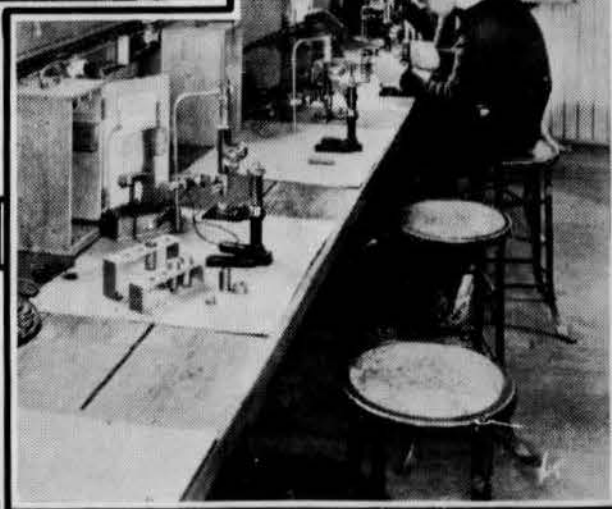
Passing Through An "Electric Eye" Door In the Electrical Engineering Building



PATTERN SHOP



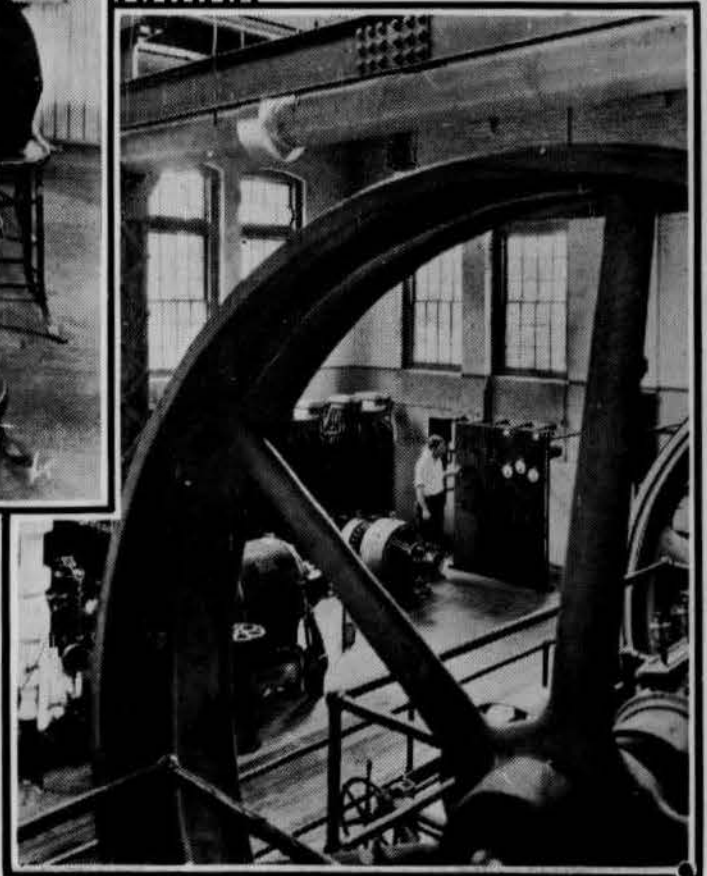
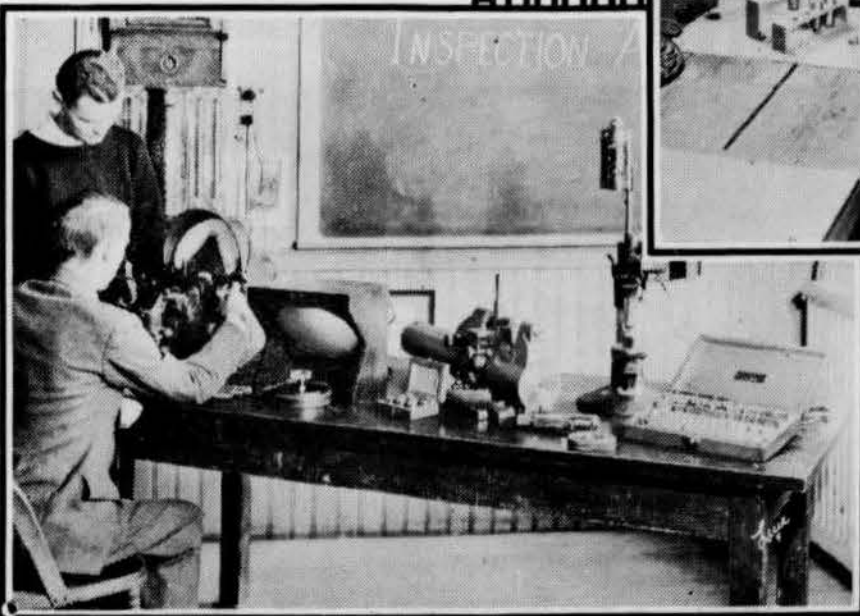
DEISEL ENGINE WORK.

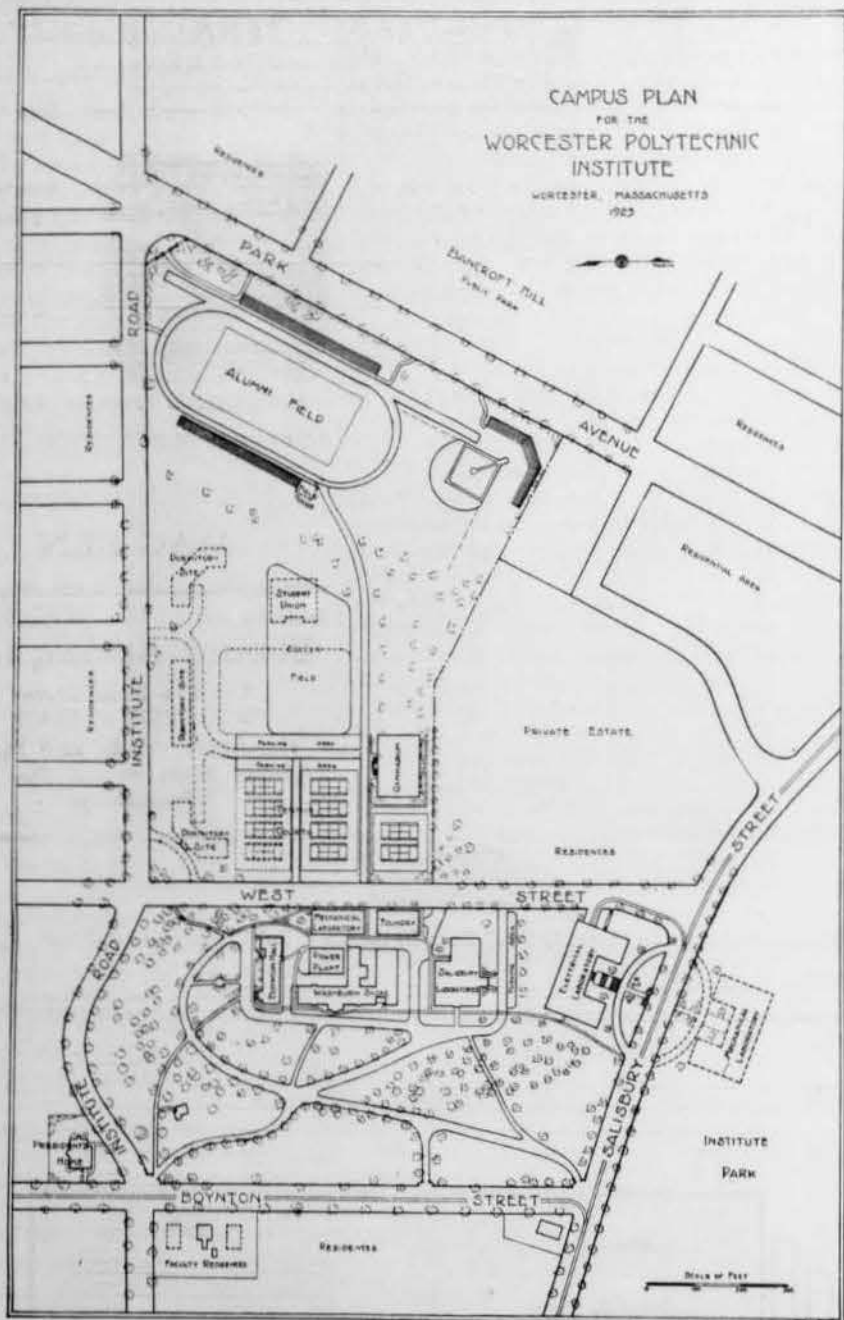


STUDENTS
STUDYING METALS
UNDER
MICROSCOPE

AT WORK WITH
HIGH-PRECISION
MEASURING
INSTRUMENTS

SECTION OF
THE
POWER HOUSE

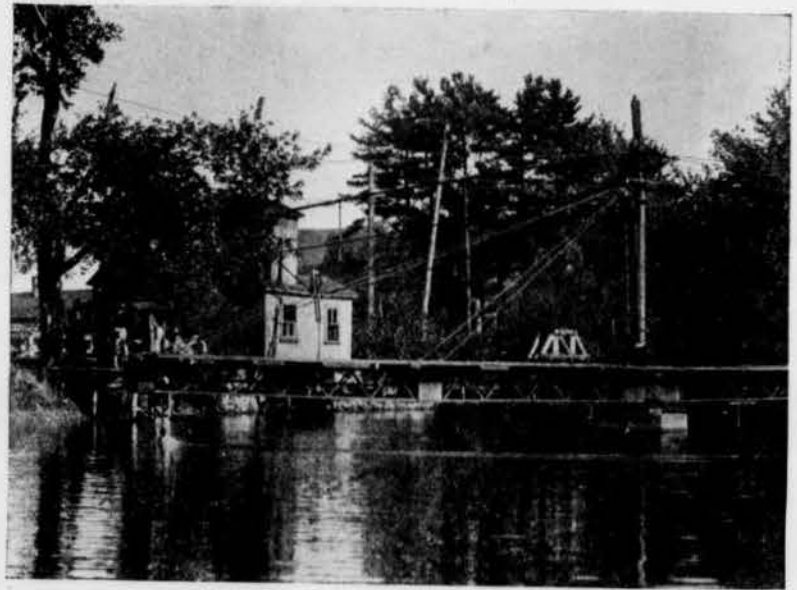




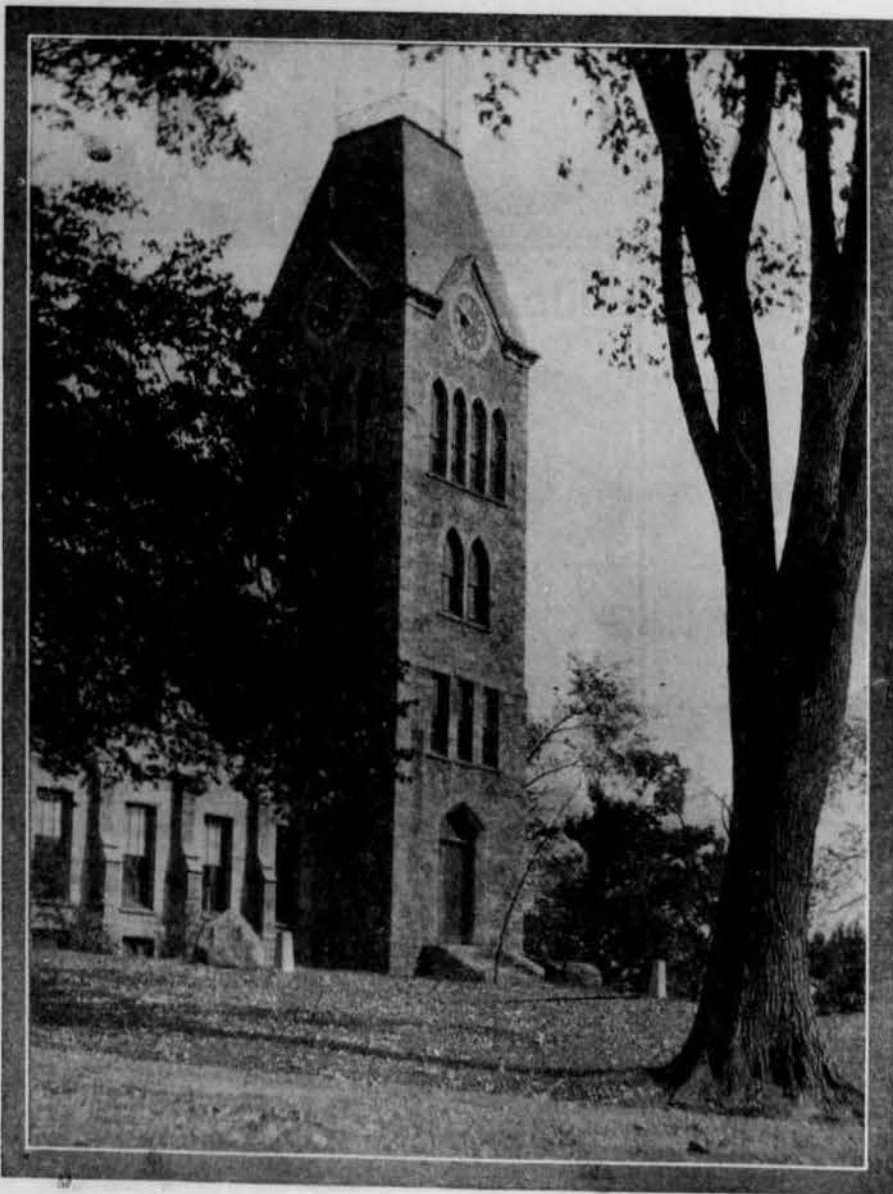
Map of the Tech Campus with proposed buildings in dotted lines.



Alden Hydraulic Laboratory at Chaffins



Meter Testing Apparatus, Alden Hydraulic Laboratory at Chaffins



Boynton Tower from the South Drive



Freshmen and Sophomores in Annual Paddle Rush

AT-HOME DAY

(Continued from Page 1, Col. 5)

ments that induce docility when the organs are all in tune and produce that characteristic ordinarily associated with a burro when its desires are crossed. She is quite capable of displaying spasms of intractability as well as moments of acquiescence in spite of her mechanical construction. This combination of natural traits makes her a very entertaining creature to look at.

There is also in this E. E. Department display a machine that catches and holds a person's shadow. One steps within the range of the light focus, the shadow is thrown onto a screen and on stepping out of the radius of light, the replica of the original is still visible on the screen.

The Chemistry Department has drawn from a wide range of fields such as mineralogy, bacteriology, biology, chemical analysis, industrial chemistry, chemical engineering, food chemistry and physical chemistry. In particular, the hydrogenation process by which cottonseed oil was converted into solid fat to become a household substitute for lard will be shown. Displays showing the detection of impurities in water

and food will form an interesting and instructive part of this exhibit. The highly successful "Bug Ranch" will occupy a conspicuous place again this year.

In the Department of Physics, feats of wizardry amount to sorcery. To cause a whistle to blow by the use and persuasion of heat energy instead of steam is certainly not usual; but to give ears to a burning flame and by their aid to detect sounds not audible to the human ear and to have that same flame reveal that it has heard, defies, it seems, natural law.

In this day when there are such projects as the building of mammoth dams, waterways, under-river tunnels and safer highways, the role of the civil engineer becomes a very important one. Some idea of its greatness may be obtained from the Civil Engineering Department display. It will include a model cross-section of the Holland Tube which connects downtown Manhattan with Jersey City. This miniature will show a part of the Tube with its arrangement of air and ventilation ducts, light cables and the stone and brick lining. In addition to this exhibit, there will be a plan showing the construction of the twenty-five mile Quabbin Aqueduct. The design will give intimate details of this great project by which flood waters from the Ware River may be diverted either into Quabbin or Wachusett Reservoir.

The Mathematics Department will have a unique exhibit in which models of solids and the intersections of solids with their resulting curves of intersection will be shown. There will also be plates illustrating the various conic sections and some of their applications. The more spectacular part will be a demonstration of the different curves formed when a plane of light cuts a cone and other geometric solids. As these are revolved and a beam of light intersects them, conic sections and other space curves will be described.

The Mechanical Department displays will include exhibitions from the laboratories within the building proper, forge shop, foundry, Washburn Shops, Aeronautics Dept. and the Chaffins Hydraulic laboratories in Holden. Opportunities will be afforded to witness the testing of the strength of materials of construction. Concrete cylinders six inches in diameter will be seen to break under extreme stress; steel

bars will be shown to stretch before breaking under excessive loads; the same tests will be made on timber splices and a machine that pulls apart samples of cast iron will complete this demonstration.

In the same building block tests will be made on a Silver Ghost Rolls Royce Engine and on a Fairbanks-Morse Diesel Engine showing how the efficiency, horsepower and fuel economy of automotive engines are determined.

On the top floor of the Washburn Shops a Gottingen motor which serves as a means of studying airplane engines will be on view.

At the Chaffins Laboratories in Holden, demonstrations will be shown of how water flows in a pipe line. Models will be shown indicating the manner in which water flows through river beds, over dams and through power houses.

Such are some of the exhibits that give a mere indication of the variety and spectacular nature of the whole display. It is evident from the meagre number mentioned that any interest in scientific work will receive healthy stimulation from viewing a cross section of the different branches of engineering taught here at Tech.

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To anxiety... I bring relief

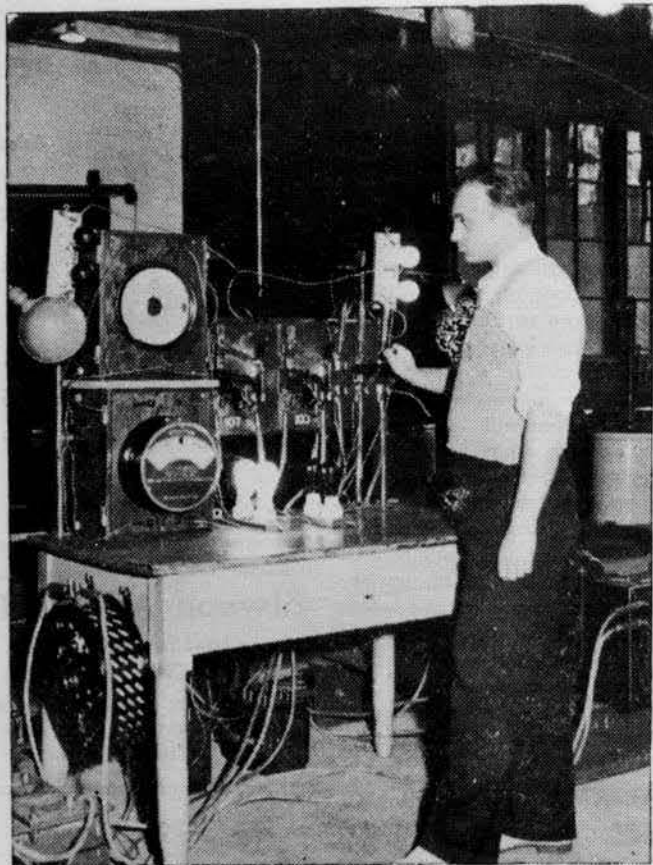
I'm your best friend
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Try me
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I am made only of the choice center leaves. The top leaves are bitter, biting. The bottom leaves are gritty, tough and unpalatable. My fragrant, expensive center leaves—so mellow and rich—give you the mildest, best-tasting smoke. I do not irritate your throat. To anxiety I bring relief. I'm your best friend.

Radio Flash
Luckies are
on the air Saturdays, with
THE HIT PARADE
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Synchronizing Two Electric Motors In Electrical Engineering Department

TIME SCHEDULE

- 1:30 p.m. And at any hour thereafter up to 10:00 p. m. Guides will be stationed at Boynton Hall, the Gymnasium, and the Electrical Engineering Laboratory, to conduct inspection tours. Boys from high and preparatory schools are requested to register at one of these three stations and receive lapel identification cards.
- 1:30 p.m. Bus leaves campus for the Alden Hydraulics Laboratories.
- 1:30 p.m. Sound-motion pictures, "The National Program in the Tennessee Valley," shown in the Mechanical Engineering lecture room.
- 2:00 p.m. Demonstrations and tests will begin in each of the laboratories.
- Mechanical Engineering Laboratory
 - Machine Construction Laboratory
 - Aeromechanics Laboratory
 - Hydraulics Laboratories
 - Electrical Engineering Laboratories
 - Chemistry Lecture Room, Salisbury Laboratories
 - Physics Lecture Room, Salisbury Laboratories
 - Civil Engineering Design Rooms
 - Mathematics, Electrical Engineering Building
- 3:00 p.m. Bus leaves campus for the Alden Hydraulics Laboratories.
- 3:00 p.m. Sound-motion pictures, "Tennessee Valley"—Mechanical Engineering lecture room.
- 4:30 p.m. Foundry demonstration—The pouring of molten iron.
- 4:30 p.m. Bus leaves campus for the Alden Hydraulics Laboratories.
- 4:30 p.m. Sound-motion pictures, "Tennessee Valley"—Mechanical Engineering lecture room.
- 6:00 to 7:00 p.m. Intermission.
- 7:00 to 10:00 p.m. Continuation of demonstrations and tests in all laboratories.
- 7:00 p.m. Sound-motion pictures, "Tennessee Valley"—Mechanical Engineering lecture room.
- 8:30 p.m. Sound-motion pictures, "Tennessee Valley"—Mechanical Engineering lecture room.

There will be opportunities for guests to inspect student rooms and to enjoy college activities, including a concert by the musical clubs.

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"Sure, enjoy yourself,"
said Jim. "It's a ding
good cigarette."



*I was working way late at the
office one night and ran out of cigarettes.
When Jim the watchman came through
I tackled him for a smoke.*

"Sure," says Jim, and he handed
over a pack of Chesterfields. "Go ahead,
Mr. Kent, take three or four."

Jim said he'd smoked a lot of ciga-
rettes in his time, but he'd put Chester-
field up in front of any of 'em when
it came to taste.

... "and they ain't a bit strong
either," is the way Jim put it.

That was the first Chesterfield I
ever smoked. And I'm right there with
him, too, when he says it's a ding
good cigarette.

Interesting—how people find out about Chesterfield